

REMARKS/ARGUMENTS

Claims 1, 3, and 5-35 are pending in the present application. No claims were canceled; claims 1, 3, 32, 33, and 34 were amended; and no claims were added. The listing of the full version of claims beginning on page 2 of this response replaces all prior versions, and listings, of claims in the application.

Support for the amendments is found in the specification and drawings as follows:

Claim 1 Amendments providing a shared computing environment in which a plurality of capacity resources are allocated in accordance with a capacity plan	[0006], lines 4-5; [0027], lines 1-3
Claim 1, 33, 34 Amendments analyzing, a time required to move a plurality of workloads from one set of central processing unit engines to another set of central processing unit engines in order to meet the second set of capacity obligations, wherein the time includes a task control block time	Figure 10a; [0063]
Claim 3, Claim 33 Amendments wherein the plurality of capacity data comprises a plurality of standard data and a plurality of non-standard data, and wherein the plurality of standard data comprises central processing unit minutes, disk storage, net bandwidth, memory used, and wherein the plurality of non-standard data comprises caching.	[0035], lines 2-5
Claim 32, “non-transitory computer readable storage medium”; Claim 33 “computer readable storage medium and computer readable memory”	[0027], lines 1-3

Reconsideration of the claims is respectfully requested.

I. Telephonic Interview

An interview was scheduled for June 28, 2010 at 2:00 p.m. EST to discuss proposed amendments. The Examiner discussed 112 issues with the proposed amendments, and indicated that additional searching would be required. No agreement was reached.

II. 35 U.S.C. § 101 (Claim 32)

The Examiner included a section in the Office Action entitled claim rejections 35 USC

101. However, in regard to claim 32, the Examiner states:

Claim 32 is considered statutory based on examiner's following analysis: Claim 32 recites "the process of claim 1 embedded in computer program product". Since Claim 1 recites "by a processor of a computer", the claimed limitation "computer program product" in claim 32 is therefore interpreted as containing computer hardware.

Office Action dated April 5, 2010, page 3.

A computer program product for managing capacity resources in a shared computing environment, the computer program product comprising:

a non-transitory computer readable storage medium;

first program instructions for providing a capacity planner that produces and maintains a capacity plan, wherein the capacity plan substantially identifies a plurality of current capacity resources and a plurality of needed capacity resources and substantially describes an allocation of the plurality of current capacity resources and the plurality of needed capacity resources;

second program instructions for executing the capacity plan so that the service provider meets all service obligations;

third program instructions for analyzing a time required to move a plurality of workloads from one set of central processing unit engines to another set of central processing unit engines in order to meet the plurality of service obligations; and

fourth program instructions for identifying a plurality of future capacity planning issues using business drivers, linear regression, percent change, direct customer input, and historical trend data;

wherein the plurality of capacity data comprises a plurality of standard data and a plurality of non-standard data, and wherein the plurality of standard data comprises central processing unit minutes, disk storage, net bandwidth, memory used, and wherein the plurality of non-standard data comprises caching; and

wherein the first, second, third, and fourth program instructions are stored on the non-transitory computer readable storage medium.

Therefore, Applicants' understanding of the Examiner's statement is that claim 32 is statutory.

III. 35 U.S.C. § 112, Second Paragraph (Claims 1, 3, and 5-35)

The Examiner has rejected claims 1, 3, and 5-35 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter, which applicants regard as the invention. Office Action dated April 5, 2010, pp. 3-4. This rejection is respectfully traversed.

In rejecting claims 1, 3, and 5-35, the Examiner states:

Independent claims 1, 32-33 recite "analyzing, by the processor, a task control block versus a system resource block time required to move a plurality of workloads from one set of central processing unit engines to another set of central processing unit engines". It is not clear to an ordinary skilled in the art what "a task control block versus a system resource block time" represents. The specification, at paragraph [0062], does not seem to help understand the scope of the claimed limitation either. The examiner presumes for the sake of examination that the claimed limitation reads "analyzing, by the processor, a time required to move a plurality of workloads from one set of central processing unit engines to another set of central processing unit engines".

Office Action dated April 5, 2010, pp. 3-4.

Claim 1 has been amended recite "analyzing, by the processor, a time required to move..."

Therefore the rejection of claims 1, 3, and 5-35 under 35 U.S.C. § 112, second paragraph has been overcome.

IV. 35 U.S.C. § 103, Obviousness (Claims 1, 6-10, 13, 16-18, and 22-35)

The Examiner has rejected claims 1, 6-10, 13, 16-18, and 22-35 under 35 U.S.C. § 103 as being unpatentable over Valdivia et al., U.S. Patent 6,904,265 (hereinafter "Valdivia"), in view of Katayama, U.S. Patent Application Publication No. 2003/0177241 (hereinafter "Katayama"), and further in view of Official Notice. Office Action dated April 5, 2010, pp. 4-18. This rejection is respectfully traversed.

The Examiner bears the burden of establishing a *prima facie* case of obviousness based on prior art when rejecting claims under 35 U.S.C. § 103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). The prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). In determining obviousness, the scope and content of the prior art are... determined; differences between the prior art and the claims at issue are... ascertained; and the level of

ordinary skill in the pertinent art resolved. Against this background the obviousness or non-obviousness of the subject matter is determined. *Graham v. John Deere Co.*, 383 U.S. 1 (1966). “Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR Int’l. Co. v. Teleflex, Inc.*, No. 04-1350 (U.S. Apr. 30, 2007). “*Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.*” *Id.* (citing *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006)).”

A. Claim 1

1. In rejecting claims 1, the Examiner relies on Valdivia, col. 1, lines 60-col. 2, lines 5, col. 1, lines 60-67, col. 17, lines 58-67, col. 22, lines 57-67 and col. 23, lines 5-18, Official Notice, and Katyama [0043]. Office Action dated April 5, 2010, pp. 4-18.

2. Claim 1 recites:

A process for managing capacity resources in a shared computing environment comprising the steps of:

providing a shared computing environment in which a plurality of capacity resources are allocated in accordance with a capacity plan;

gathering, by a processor of a computer, a plurality of capacity data for a capacity resource set, the capacity resource set including a central processing unit, a storage, a memory, a network hardware, and a plurality of peripheral devices;

analyzing, by the processor, the plurality of capacity data by extracting one or more capacity obligations from a database and comparing the one or more capacity obligations with the plurality of identified existing resources to identify a first set of capacity obligations that can be met with the plurality of existing capacity resources, and to identify a second set of capacity obligations that require a plurality of additional resources;

analyzing, by the processor, a time required to move a plurality of workloads from one set of central processing unit engines to another set of central processing unit engines in order to meet the second set of capacity obligations, wherein the time includes a task control block time; and

generating, by the processor, the capacity plan for using the plurality of identified existing resources and the plurality of identified additional resources to meet the one or more capacity obligations.

3. Statement of Facts

(a) Valdivia is directed to managing system capacity in a satellite communications system.

(b) Valdivia, col. 1, lines 60-col. 2, line 5 discloses that a “remote processor is configured to process bandwidth request messages from the terminal and to selectively allocate bandwidth to the terminal in response to bandwidth request messages.

(c) Valdivia, col. 1, lines 60-67 discloses that a method for managing system capacity for a communication system receives system capacity resource configuration data reflecting capacity requirements of a service provider.

(d) Valdivia, col. 17, lines 58-67 discloses a Network Operation Center that maintains three categories of information in one or more capacity management databases comprising a capacity resource configuration database, a network service provider capacity allocations database, and a satellite terminal service allocation database.

(e) Valdivia, col. 23, lines 5-18 discloses that a wholesaler may reconfigure capacity resources.

(f) The Examiner admits that Valdivia does not expressly disclose that the capacity resources include a storage, a memory, and a plurality of peripheral devices.

(g) The Examiner takes official notice that the above are known capacity resources at the time of the invention and that it would be obvious to a person skilled in the art to expand the resource monitored by Valdivia to other resources so that a more complete capacity planning can be achieved.

(h) The Examiner admits that Valdivia does not disclose analyzing a time to move a plurality of workloads from one central processing unit engine to another.

(i) Katayama [0043] discloses moving a processing of an image from a first processor to a second processor when the time to process the image and move the image on the second processor is less than the time to process the image on the first processor.

(j) The Examiner provides a motivation to combine Valdivia and Katayama as “to estimate the overhead of load balancing to improve overall efficiency.

4. Argument

The prior art, individually or in combination, fails to disclose “providing a shared computing environment in which a plurality of capacity resources are allocated in accordance with a capacity plan” because Valdivia is directed to managing system capacity in a satellite communications system and not in a shared computing environment.

The prior art, individually or in combination, fails to disclose “gathering, by a processor of a computer, a plurality of capacity data for a capacity resource set, the capacity resource set including a central processing unit, a storage, a memory, a network hardware, and a plurality of peripheral devices.” Valdivia, col. 1, lines 60-67 discloses that a method for managing system capacity for a communication system receives system capacity resource configuration data reflecting capacity requirements of a service provider.

The Examiner admits that Valdivia does not expressly disclose that the capacity resources include a storage, a memory, and a plurality of peripheral devices. The Examiner cites Official Notice to disclose these elements. The Examiner takes official notice that the above are known capacity resources at the time of the invention and that it would be obvious to a person skilled in the art to expand the resource monitored by Valdivia to other resources so that a more complete capacity planning can be achieved. However, the Examiner errs in using Official Notice because the Examiner has not met the requirements for Official Notice. In regard to the use of Official Notice, the MPEP states:

If such notice is taken, the basis for such reasoning must be set forth explicitly. The examiner must provide specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge. See *Soli*, 317 F.2d at 946, 37 USPQ at 801; *Chevenard*, 139 F.2d at 713, 60 USPQ at 241. The applicant should be presented with the explicit basis on which the examiner regards the matter as subject to official notice so as to adequately traverse the rejection in the next reply after the Office action in which the common knowledge statement was made.

The Examiner has not provided “specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge.” Moreover, the

Examiner has not explained how these items would be disclosed by Official Notice in the context of the entire claim.

The prior art, individually or in combination, fails to disclose “analyzing, by the processor, the plurality of capacity data by extracting one or more capacity obligations from a database and comparing the one or more capacity obligations with the plurality of identified existing resources to identify a first set of capacity obligations that can be met with the plurality of existing capacity resources, and to identify a second set of capacity obligations that require a plurality of additional resources.” Valdivia, col. 17, lines 58-67 discloses a Network Operation Center that maintains three categories of information in one or more capacity management databases comprising a capacity resource configuration database, a network service provider capacity allocations database, and a satellite terminal service allocation database. Valdivia, col. 23, lines 5-18 discloses that a wholesaler may reconfigure capacity resources. Valdivia does not disclose analyzing the capacity data to determine the two sets of obligations as claimed.

The prior art, individually or in combination, fails to disclose “analyzing, by the processor, a time required to move a plurality of workloads from one set of central processing unit engines to another set of central processing unit engines in order to meet the second set of capacity obligations, wherein the time includes a task control block time.” The Examiner admits that Valdivia does not disclose analyzing a time to move a plurality of workloads from one central processing unit engine to another. Katayama [0043] discloses moving a processing of an image from a first processor to a second processor when the time to process the image and move the image on the second processor is less than the time to process the image on the first processor. The Examiner provides a motivation to combine Valdivia and Katayama as “to estimate the overhead of load balancing to improve overall efficiency.” Katayama is limited to moving processing of an image from one processor to another and cannot be combined with Valdivia to teach or suggest the claimed limitation because the claim limitation is directed to a set of central processing unit engines. Furthermore, the claim has been amended to recite “wherein the time includes a task control time.”

The prior art, individually or in combination, fails to disclose “generating, by the processor, the capacity plan for using the plurality of identified existing resources and the plurality of identified additional resources to meet the one or more capacity obligations.”

The cited art, individually or in combination, fails to teach or suggest a capacity plan that includes identified existing resources and identified additional resources.

B. Claim 33

In rejecting claim 33, the Examiner relies on Valdivia, figure 4, , col. 5, lines 1-3, col. 4, lines 56-59, col. 1, lines 60-67; col. 9, lines 11-18, col. 23, lines 5-20.

1. Claim 33

Claim 33 recites:

A system for managing capacity resources in a shared computing environment comprising:

- a processor of a computer, a computer readable memory and a computer readable storage medium in the shared computing environment provided by a service provider having a plurality of service obligations to a plurality of customers, the computer, and a plurality of capacity resources;

- first program instructions for providing a capacity planner that produces and maintains a capacity plan, wherein the capacity plan substantially identifies a plurality of current capacity resources and a plurality of needed capacity resources and substantially describes an allocation of the plurality of current capacity resources and the plurality of needed capacity resources;

- second program instructions for executing the capacity plan so that the service provider meets all service obligations;

- third program instructions for analyzing a time required to move a plurality of workloads from one set of central processing unit engines to another set of central processing unit engines in order to meet the plurality of service obligations; and

- fourth program instructions for identifying a plurality of future capacity planning issues using business drivers, linear regression, percent change, direct customer input, and historical trend data;

- wherein the plurality of capacity data comprises a plurality of standard data and a plurality of non-standard data, and wherein the plurality of standard data comprises central processing unit minutes, disk storage, net bandwidth, memory used, and wherein the plurality of non-standard data comprises caching; and

- wherein the first, second, third, and fourth program instructions are stored on the computer readable storage medium for execution by the processor via the computer readable memory.

2. Statement of Facts

(a) Valdivia, Figure 4, discloses "NSP" Wholesaler-NSP Agreements", "NSP-BBS Agreements"

(b) Valdivia col. 5, lines 1-3 discloses "allow ST to send a specific number of packets on a satellite's uplink to a specific Destination ST."

(c) Valdivia col 4, lines 56-59 discloses "rate allocation"

(d) Valdivia col. 1, lines 60-67 discloses "system capacity ... bandwidth" includes resources for CPU, a network hardware, etc."

(e) Valdivia col. 9, lines 11-18 discloses "actual usage and interference statistics are available for the operator to determine which cells have excess capacity as well as the cells that are running short of capacity"

(f) Valdivia col. 23, lines 5-20 discloses, "based on ... contract agreement between the wholesaler and NSP ... reconfigure capacity resources"

(g) Valdivia col. 6, lines 43-45 discloses" determine downlink traffic demands based on scheduled connections, traffic models, and trend information").

(h) The Examiner admits that Valdivia does not expressly disclose the capacity resources include a storage, a memory, and a plurality of peripheral devices.

(i) The Examiner states that an "official notice is taken here that these are known capacity resources at the time of invention" and "[i]t is obvious for an ordinary skilled in the art to expand the resource monitored by Valdivia to other resources so that a more complete capacity planning can be achieved."

(j) The Examiner admits that Valdivia does not expressly disclose projection methodologies recited in the claim such as business driver, linear regression, percent change, and direct customer input.

(k) The Examiner takes official notice that the projection methodologies recited above are known in the field of capacity planning and that US patent 6,738,736, col. 16, lines 16-30 discloses "business drivers ."

(l) The Examiner admits that Valdivia does not expressly disclose analyzing "a time required to move a plurality of work loads from one central processing unit engines to another set of central processing units engines."

(m) Katayama [0043] discloses moving a processing of an image from a first processor to a second processor when the time to process the image and move the image on the second processor is less than the time to process the image on the first processor.

(n) The Examiner states that the motivation to combine Valdivia and Katayama “would have been to estimate the overhead of load balancing to improve overall efficiency.”

Many of the same arguments for claim apply to claim 33 as well. In addition, the prior art, individually or in combination, fails to disclose “in the shared computing environment provided by a service provider having a plurality of service obligations to a plurality of customers, the computer, and a plurality of capacity.” Valdivia fails to disclose a shared computing environment.

The prior art, individually or in combination, fails to disclose “first program instructions for providing a capacity planner that produces and maintains, by a processor, a capacity plan, wherein the capacity plan substantially identifies a plurality of current capacity resources and a plurality of needed capacity resources and substantially describes an allocation of the plurality of current capacity resources and the plurality of needed capacity resources.”

The prior art, individually or in combination, fails to disclose, “second program instructions for executing the capacity plan so that the service provider meets all service obligations.”

The prior, art, individually or in combination, fails to disclose, “third program instructions for analyzing a time required to move a plurality of workloads from one set of central processing unit engines to another set of central processing unit engines in order to meet the plurality of service obligations.”

The prior art, individually or in combination, fails to disclose “fourth program instructions for identifying a plurality of future capacity planning issues based on a set of projection methodologies including using business drivers, linear regression, percent change, direct customer input, and historical trend data.”

The Examiner admits that Valdivia does not disclose analyzing a time to move a plurality of workloads from one central processing unit engine to another. Katayama [0043] discloses moving a processing of an image from a first processor to a second processor when the time to process the image and move the image on the second processor is less than the time to process the image on the first processor. The Examiner provides a motivation to combine Valdivia and Katayama as “to estimate the overhead of load balancing to improve overall efficiency.

Katayama is limited to moving processing of an image from one processor to another and cannot be combined with Valdivia to teach or suggest the claimed limitation because the claim limitation is directed to a set of central processing unit engines. Furthermore, the claim has been amended to recite “wherein the time includes a task control time.”

The Examiner admits that Valdivia does not expressly disclose projection methodologies recited in the claim such as business driver, linear regression, percent change, and direct customer input. The Examiner takes official notice that the projection methodologies recited above are known in the field of capacity planning and that US patent 6,738,736, col. 16, lines 16-30 discloses “business drivers.” However, the Examiner errs in using Official Notice because the Examiner has not met the requirements for Official Notice. In regard to the use of Official Notice, the MPEP states:

If such notice is taken, the basis for such reasoning must be set forth explicitly. The examiner must provide specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge. See *Soli*, 317 F.2d at 946, 37 USPQ at 801; *Chevenard*, 139 F.2d at 713, 60 USPQ at 241. The applicant should be presented with the explicit basis on which the examiner regards the matter as subject to official notice so as to adequately traverse the rejection in the next reply after the Office action in which the common knowledge statement was made.

The Examiner has not provided “specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge.” Moreover, the Examiner has not explained how these items would be disclosed by Official Notice in the context of the entire claim.

The prior art, individually or in combination, fails to disclose “wherein the plurality of capacity data comprises a plurality of standard data and a plurality of non-standard data, and wherein the plurality of standard data comprises central processing unit minutes, disk storage, net bandwidth, memory used, and wherein the plurality of non-standard data comprises caching.”

C. Claims 6-10, 13, 16-18, 22-32, and 34-35

Claims 6-10, 13, 16-18, and 22-32 depend from claim 1 and are allowable for the reasons set forth above in regard to claim 1. Claims 34-35 depend from claim 33 and are allowable for the reasons set forth above in regard to claim 33.

Therefore, the rejection of claims 1, 6-10, 13, 16-18, and 22-35 under 35 U.S.C. § 103 has been overcome.

V. 35 U.S.C. § 103, Obviousness (Claims 3-5)

The Examiner has rejected claims 3-5 under 35 U.S.C. § 103 as being unpatentable over Valdivia in view of Katayama and Official Notice, as applied to claim 33, and further in view of Wickham et al., U.S. Patent No. 6,307,546 (hereinafter “Wickham”). Office Action dated April 5, 2010, pp. 18-21. This rejection is respectfully traversed.

The Examiner bears the burden of establishing a *prima facie* case of obviousness based on prior art when rejecting claims under 35 U.S.C. § 103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). The prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). In determining obviousness, the scope and content of the prior art are... determined; differences between the prior art and the claims at issue are... ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or non-obviousness of the subject matter is determined. *Graham v. John Deere Co.*, 383 U.S. 1 (1966). “Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR Int’l. Co. v. Teleflex, Inc.*, No. 04-1350 (U.S. Apr. 30, 2007). “Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *Id.* (citing *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006)).”

A. Claim 3

In rejecting claims 3-5, the Examiner states:

As to claim 3, the Examiner cites Valdivia, figure 4, "Wholesaler-NSP Agreements; NSPBBS Agreements");

The Examiner admits that Valdivia does not expressly disclose determining if the capacity data is already available; acquiring the capacity data from the database; validating the capacity data; determining if there is a regular need for the data; and updating and documenting the database.

The Examiner cites Wickham col. 10, lines 52-56, "determine whether the requested objects have already been retrieved"); (col. 10, lines 45-48, "the information is now retrieved

from a network database"; lines 58-59, "answers the "cached" objects"); (col. 10, lines 53-55, "checks its own state and determines whether the requested objects have already been retrieved"); col. 10, lines 58-62, the requested data is determined as needed data) and (col. 10, lines 58-62, "installs them into the domain model and answers them").

The Examiner states that suggestion/motivation to combine Wicknam and Valdivia "would have been to improve efficiency (Wickham, col. 10, line 63, "lazy" retrieval)."

Claim 3 recites:

The process of Claim 1 wherein gathering capacity data comprises the steps of:
determining capacity data requirements;
determining suppliers of the capacity data;
determining if the capacity data is already available;
acquiring the capacity data from a database;
validating the capacity data;
determining if there is a need for the capacity data; and
updating and documenting the database;
wherein the plurality of capacity data comprises a plurality of standard data and a plurality of non-standard data, and wherein the plurality of standard data comprises central processing unit minutes, disk storage, net bandwidth, memory used, and wherein the plurality of non-standard data comprises caching.

The capacity data, as defined in claim 1, distinguishes claim 3 from the prior art. In addition, the prior art, individually or in combination, fails to teach or suggest "wherein the plurality of capacity data comprises a plurality of standard data and a plurality of non-standard data, and wherein the plurality of standard data comprises central processing unit minutes, disk storage, net bandwidth, memory used, and wherein the plurality of non-standard data comprises caching."

B. Claim 5

In rejecting claim 5, the Examiner states:

As to claim 5, Valdivia-Katayama-ON discloses the process of claim 1 further comprising the steps of:

before gaining approval for the capacity plan, designing a configuration to support the capacity plan (Valdivia, figure 5, "Analysis Response"; col. 22, line 53- col. 23, line 15, before negotiating with wholesaler, it is determined 1) the requested services can be provided based on current system configuration of capacity resources. The current configuration is a configuration designed to support the capacity plan); and

testing the designed configuration to determine if the configuration is capable of balancing a workload as required to meet existing and anticipated

capacity obligations (Valdivia, col. 22, line 53- col. 23, line 15, before negotiating with wholesaler, it is tested whether 1) the requested services can be provided based on current system configuration of capacity resources); gaining approval for the capacity plan from one or more persons with the authority to commit to the implementation of the capacity plan (figure 5, "negotiation"; col. 23, lines 5-18, "negotiation between the wholesaler and NSP ... authorizes");

notifying any parties to the capacity plan of the plan details (Valdivia, col. 23, lines 5-18, "the wholesaler instructs the NOC 107 to reconfigure capacity resources").

handling capacity requests from a requester (Valdivia, col. 1, line 60 - col. 2, line 5, "The remote processor is configured to process bandwidth request messages from the terminal; figure 5, "Capacity Request");

performing analysis review on capacity requests to identify capacity issues (Valdivia, figure 5, "Capacity Analysis Request", "Analysis Response"); and

executing a problem manager program in a data-processing system to resolve any identified capacity issues so that a service provider can meet all service obligations (Valdivia, col. 1, line 60 - col. 2, line 5, "generating a capacity plan ... selectively allocate bandwidth to the terminal in response to the bandwidth request messages. Under this approach, the capacity requirements of multiple service providers can be efficiently managed"; col. 13, lines 17-30, "allocating uplink resources based on congestion parameters and discarding packets when congestion occurs or is imminent ... contend for resources in an orderly fashion as prescribed by the service capabilities, which the ST is provisioned and to respond to congestion information sent from the payload");

identifying a plurality of future capacity planning issues based on a set of projection methodologies including business drivers, linear regression, percent change, direct customer input, and historical trend data (see similar rejection to claim 33 above).

Valdivia et al, however, does not expressly disclose responsive to determining that the capacity data is not already available, contacting the capacity data owner; requesting the capacity data; and justifying the request for the capacity data to the capacity data owner. Wickham discloses responsive to determining that the capacity data is not already available (col. 10, lines 52-56, "determine whether the requested objects have already been retrieved"), contacting the capacity data owner (col. 10, lines 60-62); requesting the capacity data; and justifying the request for the capacity data to the capacity data owner (col. 10, lines 51-57).

At the time of invention, it would have been obvious to a person of ordinary skilled in the art to combine the teachings disclosed by Valdivia, with the teachings disclosed by Wickham regarding determining if the requested data is already available; acquiring the requested data from the database; validating the requested data; determining if there is a regular need for the data; and updating and documenting the database. The suggestion/motivation of the combination

would have been to improve efficiency (Wickham, col. 10, line 63, "lazy" retrieval).

Office Action dated April 5, 2010, pp. 18-21.

Claim 5 recites:

The process of Claim 1 further comprising the steps of:
before gaining approval for the capacity plan, designing a configuration to support the capacity plan; and
testing the designed configuration to determine if the configuration is capable of balancing a workload as required to meet existing and anticipated capacity obligations;
gaining approval for the capacity plan from one or more persons with the authority to commit to the implementation of the capacity plan;
notifying any parties to the capacity plan of the plan details;
handling capacity requests from a requester;
performing analysis review on capacity requests to identify capacity issues;
executing a problem manager program in a data-processing system to resolve any identified capacity issues so that a service provider can meet all service obligations;
responsive to determining that the capacity data is not already available, contacting the capacity data owner;
requesting the capacity data;
justifying the request for the capacity data to the capacity data owner; and
identifying a plurality of future capacity planning issues based on a set of projection methodologies including business drivers, linear regression, percent change, direct customer input, and historical trend data.

The Examiner construes the claims in an overly broad manner. The terms in the claims must be construed in light of the claim language and then in regard to the specification. As explained above, "capacity data" as defined in claim 1 is not disclosed by the cited art. The capacity data, as defined in claim 1, distinguishes claim 5 from the prior art. In addition, the prior art, individually or in combination, is silent in regard to "justifying the request for the capacity data to the capacity data owner." Furthermore, the prior art, individually or in combination, fails to recite "identifying a plurality of future capacity planning issues based on a set of projection methodologies including business drivers, linear regression, percent change, direct customer input, and historical trend data." The Examiner takes official notice that the projection methodologies recited above are known in the field of capacity planning and that US

patent 6,738,736, col. 16, lines 16-30 discloses “business drivers.” However, the Examiner errs in using Official Notice because the Examiner has not met the requirements for Official Notice as discussed above.

Therefore, the rejection of claims 3-5 under 35 U.S.C. § 103 has been overcome.

VI. 35 U.S.C. § 103, Obviousness (Claims 11, 14, 15, 19, and 20)

The Examiner has rejected claims 11, 14, 15, 19, and 20 under 35 U.S.C. § 103 as being unpatentable over Valdivia in view of Katayama and Official Notice, as applied to claim 1, and further in view of Wichelman et al., U.S. Patent No. 6,853,932 (hereinafter “Wichelman”). Office Action dated April 5, 2010, pp. 21-24.

Claims 11, 14, 15, 19, and 20 depend from claim 1 and are allowable for the reasons set forth above in regard to claim 1.

Therefore, the rejection of claims 11, 14, 15, 19, and 20 under 35 U.S.C. § 103 has been overcome.

VII. 35 U.S.C. § 103, Obviousness (Claims 12 and 21)

The Examiner has rejected claims 12 and 21 under 35 U.S.C. § 103 as being unpatentable over Valdivia in view of Katayama and Official Notice, and further in view of Whitman, Jr., U.S. Patent No. 7,499,844 (hereinafter “Whitman”). Office Action dated April 5, 2010, pp. 24-25.

Claims 12 and 21 depend from claim 1 and are allowable for the reasons set forth above in regard to claim 1.

Therefore, the rejection of claims 12 and 21 under 35 U.S.C. § 103 has been overcome.

VIII. Conclusion

It is respectfully urged that the subject application is patentable over the cited references and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

DATE: July 6, 2010

Respectfully submitted,
/Rudolf O. Siegesmund/

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